Chapter 2: Instruction

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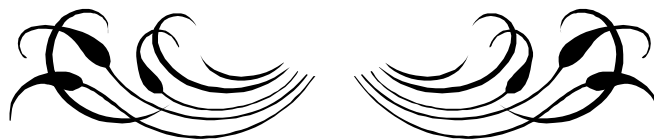**III. Information Literacy**
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INTRODUCTION

The ultimate purpose of the library media center program is to enable students to learn. The library media program contributes to the success of every student by developing reading and information skill programs, providing intellectual resources that are basic to learning, and helping students understand and utilize critical thinking as an integral part of their education and their lives. Missouri is well positioned to provide support for this purpose through the already established programs and documents that address student learning. Specific to Missouri are: the *Missouri School Improvement Program Standards and Indicators Manual*, the *Show-Me Standards*, the *Information and Technology Literacy Companion to the Show-Me Standards*, and the *Show-Me Plans: Mapping A Brighter Future*; and, on the national level, the *Information Literacy Standards For Student Learning* (American Association of School Librarians).

These documents assist in the development of strategies that go beyond the textbook to a resource-based approach to teaching, assessment, and learning. For example, the *Show-Me Standards* directly support the importance of a quality school library media program which helps students develop the skills that enable them "to gather, analyze and apply information and ideas...within and integrated across all content areas." (Goal 1) Achievement of this goal requires interdisciplinary collaborations between the library media specialists and teachers. Successful collaborations provide students access to a wide variety of local and remote resources and to alternative methods for the presentation of ideas and research.

Goal three of the *Show-Me Standards* addresses the method of research incorporating the eight (8) problem solving standards. These could be applied to solve problems in any area of research, in any discipline, or on a personal level. The application of a problem solving model will prepare and empower students to be lifelong learners.

INSTRUCTIONAL PARTNERSHIPS

As stated in *Information Power*,

"A fundamental responsibility of the library media specialist is to provide the leadership and expertise necessary to ensure that the library media program is an integral part of the instructional program of the school." (AASL 26)

Therefore, the library media specialist must be considered an essential member of the instructional staff.

It is imperative that the LMS establish collaborative partnerships with classroom teachers by:

- serving on curriculum development committees at all levels in order to integrate information literacy and provide instructional resources;
- working jointly with teachers as partners in the planning, designing, teaching and evaluation of instructional activities;
- assisting both teachers and students in the effective use of instructional technologies; and
- establishing the integration of information literacy skills across the curriculum.

Partnerships can ensure that instructional design is truly a collaborative effort beginning with the instructional unit through the final assessment of the process and product.

INFORMATION LITERACY

Information literacy may be defined as the ability to access information efficiently and effectively, to evaluate information critically and competently, and to use the information effectively and creatively. (AASL, *Information Literacy*, 2). Alvin Toffler in his book, *Power Shift*, makes the case that in our global society where information is a dominant resource, learners must be information literate.

The SCANS report identifies the following skills that the American work force will need in the future:

- Resources: Identifies, organizes, plans and allocates resources
- Interpersonal: Works with others
- Information: Acquires and uses information
- Systems: Understands complex interrelationships
- Technology: Works with a variety of technologies (*What Work* vii)

"What is called for is... a restructuring of the learning process. Textbooks, workbooks, and lectures must yield to a learning process based on the information resources available for learning and problem solving throughout people's lifetimes..." This learning process actively involves students in:
- *Knowing when information is needed*
- *Identifying which information is needed to address a given problem or issue*
- *Finding, evaluating and organizing the information*
- *Using information effectively to address a specific problem or issue.*

Students become empowered as critical thinkers and lifelong learners.

Report of the American Library Association, Presidential Committee on Information Literacy as quoted in *Information Connections*.

(Minnesota 1)

The role of the library media program in the educational process continues to grow in significance as these concepts are put into practice. Changing philosophies of education such as restructuring, resource-based learning, and active learning reemphasize the important and ever-changing role of the library media program. Library media professionals, collaborating with classroom teachers, are a key component in providing resources and instruction which focus on preparing students for successful living in an information society.

Empowering students with information literacy is a basic precept of school library media programs. Students must have frequent opportunities to work with all kinds of information whether that information is in the library media center, in the classroom, in the community, or beyond. The development of these skills must be supported by the library media center program and should be applied in every curricular area taught in Missouri's schools. Integration throughout the curriculum can best be facilitated through resource-based learning and teaching. A collaborative effort between the library media specialist and the classroom teacher is needed to design instruction that assists students in acquiring information skills. This collaboration helps students achieve information skills such as locating, selecting, analyzing, evaluating, and utilizing information and communicating knowledge. In an effective partnership, the students' information experience moves from learning facts and skills to learning in an environment which encourages active involvement with information literacy throughout the curriculum. Thus, students who become critical thinkers and lifelong learners are prepared for future success.

■ **Reading**

Quality library media programs, staffed by professional library media specialists, are key components in developing students' literacy. Stephen Krashen in *The Power of Reading* analyzes research about reading and examines the school library media program's contribution. His research documents the relationship between literacy development and free voluntary reading:

> ***"Reading is the only way we become good readers, develop a good writing style, an adequate vocabulary, advanced grammar, and the only way we become good spellers."*** (23)

Findings from Krashen's *The Power of Reading*

- Voluntary reading is the best predictor of reading comprehension, vocabulary growth, spelling ability, grammatical usage, and writing style.
- Access to SLMCs results in more voluntary reading by students.
- Having a school library media specialist makes a difference in the amount of voluntary reading done.
- Larger school library collections and added hours of availability increase both circulation and amount read. (Stripling 1)

A library media program which encourages students to read for pleasure contributes much to student literacy. Although many students choose non-fiction books for voluntary reading, fiction titles still have strong appeal. Fiction materials contribute substantially to developing student literacy and broadening students' interests and backgrounds. They foster life-long love for reading.

Research shows that students who do not develop a pleasure reading habit will have a difficult time meeting the literacy demands of the workplace (Krashen x). Further, "The research supports the common sense view that when books are readily available, when the print environment is rich, more reading is being done." (Loertscher 32)

■ **Technology**

In today's schools, technology plays a major role in accessing information. No single area within the school has been more transformed by technology than the library media center. Technology provides more opportunities for effective communication, access to vast quantities of information, and the management and utilization of data. Tools that should be common in the library media center such as CD-ROM, interactive video, and

telecommunication access provide real-life experience models for students. The library media specialist's vision must include less explored and less utilized technologies such as virtual reality, hypermedia, and multimedia platforms. Restructured curricula, effective staff development, and quality educational practices are significantly improved through the linkage of technological tools and the library media program.

The library media program should serve as the technological hub of the school. Through school-wide networks that access the Internet and distance learning opportunities, information can be disseminated from the library media center to the classrooms to connect students to the outside world. The role of the library media specialist as an information intermediary is not diminished but becomes even more critical as students and staff confront an excess of information.

The library media specialist facilitates teachers' use of technology for production, instruction, classroom management, and student inquiry and communication through effective use. To ensure that this occurs, technology should be treated as a tool for learning rather than as an independent discipline. Through the use of technology the library media specialist, in partnership with the technology coordinator/facilitator, can assist teachers and students in:

- enhancing information inquiry and processing skills;
- gathering information from global perspectives;
- communicating with others in a global environment;
- analyzing data;
- facilitating presentation and production of ideas through multimedia; and
- expanding teaching and learning opportunities.

INSTRUCTIONAL DESIGN

■ **Resource-Based Learning**

In resource-based learning, students use a variety of resources and technologies in multiple formats to broaden educational experiences. Students become active learners, taking responsibility for their own research by building a knowledge-base in particular areas and interacting with other opinions and perceptions. This personalization of learning enhances students' retention of information.

Student experiences with information can be carefully constructed through collaborative efforts involving the student, library media specialist, teacher, and parent. Students become the center of their learning environment with a focus on how they utilize resources to facilitate their own understanding. For resource-based learning to be successful, the library media center must function as a learning laboratory. The concept of the learning laboratory requires multiple experiences such as peer interaction, technological access to ideas from all over the world, and opportunities that lead to student productions in a variety of formats.

The library media program and curriculum must be linked in a strong coalition to implement the instructional program. A true instructional partnership requires collaborative planning between the library media specialist and teacher, including joint development of objectives, activities and assessments to facilitate student learning. This linkage supports interdisciplinary connections and allows students to transfer their learning strategies across the curriculum. (See samples of instructional planning models in Appendix B)

■ **Assessment**

Just as information literacy skills are woven into the design and implementation of the curricula, so should the assessment of these skills be evaluated in context rather than isolation. Library media specialists and teachers should work together to design assessment instruments. The research process should be evaluated as well as the product.

■ **·Flexible scheduling**

"The term flexible scheduling describes a program in which instructional, investigative, and production/communication experiences of students, individually or in various sized groups, are based on need rather than on routine weekly visits for class group instruction." (Minnesota 5)

Flexible scheduling is vital if the library media specialist is to effectively integrate information skills into classroom instruction and interdisciplinary activities at the time of need. Flexible scheduling provides greater opportunities for students to weave research, analysis, communication, and production into a complete learning experience as it fits into the curriculum. It supports individual as well as group process learning maximizing access to the expertise of library media specialists and resources. The incorporation of flexible scheduling requires the support and leadership of the school administrator as well as the classroom teacher. By eliminating the barrier of fixed scheduling, flexible scheduling can provide an environment that is more meaningful to student learning. Fully integrating flexible scheduling into the instructional program of the school provides greater opportunities for the formation of partnerships between the library media specialist, students, and teachers.

Advantages of Flexible Scheduling

- The LMC becomes an integral component in increasing student learning and achievement.
- Information literacy skills are more easily integrated into the curriculum.
- Study groups and classes can continue a lesson to a natural conclusion without the restriction of fixed scheduling.
- Technology can be better integrated into all areas of the curriculum.
- Instruction can be provided at the time of need.
- Learning is directed toward a purpose.
- The LMC becomes an extension of the classroom as a learning laboratory.
- Students are able to complete long-range projects.
- It encourages continued library use, supporting the idea of lifelong learning.

"Students who learn a library skill while simultaneously using it are more likely to remember the skill and use it again independently." (Bernstein 11)

SHOW-ME STANDARDS

■ **Correlation of Information Literacy Skills to the Curriculum**

The belief that active learning benefits all students is a common thread in Missouri's *Show-Me Standards*, curriculum frameworks, and assessment system. By integrating and applying basic knowledge and skills in practical and challenging ways across all disciplines, students experience learning that is engaging, challenging, and motivating. Such learning stays

in the mind long after the tests are over and acts as a springboard to success beyond the classroom. Library media specialists fully endorse the concept that active learning is crucial to the academic success of students, a fact which supports and furthers the ideas and goals as outlined in curriculum frameworks. (See samples of frameworks in Appendix B)

■ **Information Literacy and Technology Companion**

The *Information and Technology Literacy Companion to the Show-Me Standards* connects information skills to the *Show-Me Standards*. The *Companion* outlines components of information literacy with specified skills cross-referenced and mapped to the *Show-Me Standards*. (See *Companion* in Appendix C)

■ **School Library Media Programs and Student Achievement**

As early as 1956, studies directly connected student academic achievement to library media center access. Staffing by professional library media specialists has further promoted this access. Greater availability for students to school library media centers has produced:

- increased vocabulary skills;
- higher overall standardized test scores;
- higher scores in reading skills/ comprehension;
- greater problem-solving/critical thinking skills when both the LMS and teacher collaborate in the teaching; and
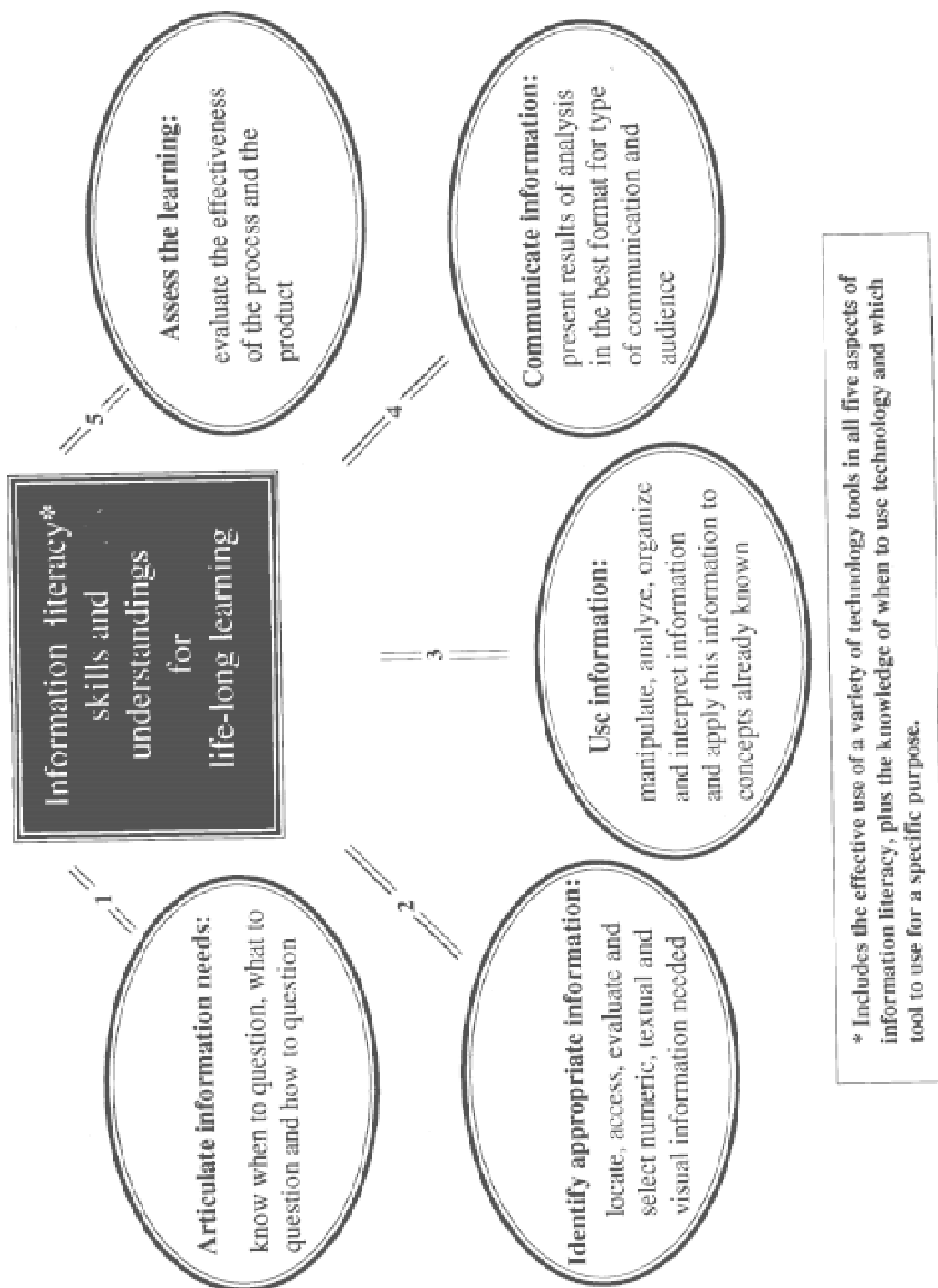- more in-depth reading of a greater variety of higher quality books.

In 1987, a study was conducted by a private business company to help employees who were relocating choose quality schools for their children. It was determined "that the strongest predictor of test performance for young children is school library media

expenditures."(Loertscher 30) Keith Lance continued this study and published the findings in the Colorado Department of Education's *The Impact of School Library Media Centers on Academic Achievement*.

Conclusions of the 1993 Colorado study:

- "The size of an LMC's staff and collection is the best school predictor of academic achievement."
- "Among school and community predictors of academic achievement, the size of the LMC staff and collection is second only to the absence of at-risk conditions, particularly poverty and low educational attainment among adults."
- "Students who score higher on norm referenced tests tend to come from schools with more LMC staff and more books, periodicals, and videos."
- "The instructional role of the library media specialists shapes the collection and, in turn, academic achievement."
- "Library media expenditures affect LMC staff and collection size and, in turn, academic achievement." (Lance 92)

"Information literacy, technology literacy and visual literacy, which include critical thinking and discriminative viewing, are essential if students are to live successfully in our rapidly changing, information-oriented society. To be information literate is to be an effective user of information in a variety of formats." (Minnesota 4)

Information literacy* skills and understandings for life-long learning

Articulate information needs:
know when to question, what to question and how to question

1

Identify appropriate information:
locate, access, evaluate and select numeric, textual and visual information needed

2

Use information:
manipulate, analyze, organize and interpret information and apply this information to concepts already known

3

Communicate information:
present results of analysis in the best format for type of communication and audience

4

Assess the learning:
evaluate the effectiveness of the process and the product

5

* Includes the effective use of a variety of technology tools in all five aspects of information literacy, plus the knowledge of when to use technology and which tool to use for a specific purpose.

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